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by a thrifty growth of *Cladium mariscoides*, Torr., *Carex Oederi*, Ehrh. and *Juncus alpinus*, Villars, var. *insignis*, Fries; while a few steps further off we find *Triglochin palustre*, L.

Prunus pumila, L., is described in Gray's Manual as "depressed and trailing, 6'—18' high," but on Presque Isle we find this cherry often from 40°—60° in height. My most interesting find, perhaps, is a willow, which Mr. Bebb has now under examination, and which may be a variety of *Salix adenophylla*, Hook. Few new discoveries were made in the vicinity of Erie, the most interesting find being a patch of *Althaea officinalis*, L., discovered east of the city by J. Miller, a member of our Botany Section.

G. GUTTENBERG.

§ 24. **The Development of *Sphaeria Solidaginis*, Schw.**—This fungus, which is common on various species of *Solidago* all through the Atlantic slope of the United States, was first collected by Schweinitz in Carolina over half a century ago and described in his *Synopsis Fungorum Carolinae*, as *Sphaeria Solidaginis*; but in more recent times it has been referred to the genus *Dothidea*. Those who have observed this species in a living state have doubtless noticed the fact mentioned by Schweinitz that it is often found in company with an *Uredo*. It is to this peculiarity that I wish to call attention. As early, at least, as September the lower surface of the leaves on the *Solidagos* affected with this fungus will begin to show the presence of the *Uredo* (*U. Solidaginis*, Schw.), which, as Baron de Thümen has shown (Vol. vi, p. 216 of this journal), is really a *Coleosporium*.

The radical leaves will generally be the first affected, but, soon after, also those of the stem and even the bract-like leaves among the inflorescence. In some species, especially *Solidago lanceolata*, the branches of the panicle and the main stem itself are thickly dotted with the *Coleosporium*. By the middle of October, or sooner, it will be noticed that the orange-red color in many of the clusters of *Coleosporium* spores (especially those on the radical and lower cauline leaves) has changed to a dark-brown or nearly black, and an examination with a lens will show, not the spores of the *Coleosporium*, but a little black, subglobose, crustaceous stroma about the size of a large mustard-seed, and which is in fact the pycnidium of the *Dothidea*, and contains hyaline, fusiform, uniseptate stylospores, .0006'—.0007' x .00015'. The perfect fruit or sporidia, which much resemble the stylospores, will not appear till the following spring or summer. Further examination will show that some of the *Coleosporium* clusters appear partly orange and partly brown or black; and, if a section be made of one of these and examined under the microscope, it will be seen that in the midst of the cluster of *Coleosporium* spores, the black, cellular, crustaceous stroma of the *Dothidea* is in process of formation.

From repeated observation of the facts here briefly stated I believe the *Coleosporium* to be the rudimentary stage of the *Dothidea*, and hope to be able during the coming season to collect and distribute, in the "North American Fungi," specimens to illustrate this view.

Newfield, N. J., Feb. 10, 1881.

J. B. ELLIS.